BRIDGE CONDITIONS

However people or goods travel (automobile, truck, train, bus, bicycle, foot, snowmobile, motorcycle, or other means), bridges provide river crossings, railroad crossings, or other road crossings. Within the State of New Hampshire there are 3,767 bridges (structures 10 feet or greater in length carrying a highway), of which, 2,123 are State maintained structures, and 1,644 are maintained by municipalities or other agencies/owners.

Bridges today are typically designed for an expected service life of at least 70 years. With advancements in new technology, better construction materials, and updated design standards the projected service life of newer bridges may stretch to 100 or more years. These advancements also result in less maintenance over the life of the bridge. In the past a 50 year service life was the standard.

All state and municipally owned bridges in New Hampshire are inspected at regular intervals based on the bridge's ownership and its condition. All bridges deemed to be in acceptable condition are inspected every two years. Bridges that are questionable are inspected more frequently; for State-owned bridges, such structures are inspected twice a year, and, for municipally-owned bridge, such structures are inspected by the State once a year. Based on this inspection information and other data collected on a bridge, determinations can be made as to the proper course of action for that bridge. If the bridge's condition is not good, it may need rehabilitation or replacement.

Bridge condition is a concern to the Department, municipalities, and the public. When conditions reach the status of structurally deficient, functionally obsolete, or Red List, consideration must be given to rehabilitation or replacement. Definitions of each of these conditions are as follows:

Structurally Deficient – A bridge which, due to its deteriorated condition, no longer meets current standards for load carrying capacity and structural integrity.

Functionally Obsolete – A bridge which, due to the changing need of the transportation system, no longer meets current standards for deck geometry, load carrying capacity, vertical or horizontal clearances, or bridge approach alignment.

Red List – Bridges that require more frequent inspections due to known deficiencies, poor structural conditions, weight restrictions, or the type of construction (such as a replacement bridge installed on a temporary basis).

Although the public may perceive Red List bridges to be those in the worst condition, this is not always true. The Red List identifies bridges requiring additional inspection efforts, as indicated above. Some of these bridges are historic, such as covered bridges, and will always remain on the Red List. These specific types of bridge structures have lower design specifications and load carrying capacities as compared to newer bridges, and cannot likely be modified or rehabilitated to

meet current design or rating capacities. In total, there are 12 of these types of structures that will probably always be on the State Red List.

The following tables and accompanying maps depict the condition of all State-owned, Municipally-owned, and other highway bridges as of April 2008.

Bridge Condition	State-Owned Bridges	Non State-Owned Bridges	Totals
Red List Bridges (Non-Historic)	125	344	469
Red List Bridges (Historic)	12	26	38
Structurally Deficient and/or Functionally Obsolete (non-Red List)	208	225	433
Good Condition	1,778	1049	2,827
Totals:	**2,123**	**1,644**	**3,767**

Expected Future Conditions

The future condition of the State's bridges depends on a number of factors. The availability of funding to repair and replace deficient or obsolete bridges remains a concern. In addition, the present condition, the amount of traffic carried, and the types of loading placed on each bridge are also important considerations.

Based on the results of bridge replacement and rehabilitation efforts over the past fourteen years, the Department has successfully reduced the total number of State-owned Red List bridges, however, the number of bridges being added to the Red List each year offsets most of these gains. Thus, although in the past fifteen years an average of approximately 20 bridges per year have been removed from the Red List, over that same time period an average of approximately 15 bridges per year have been added to the Red List. Thus the rate of bridge deterioration has limited the net decrease of State-owned bridges from the Red List to only 4 or 5 per year. It is taking longer to address state owned Red List bridges. It is currently taking an average of 8 years to address a bridge on the Red List, where as previously bridges were on the Red List for an average of 5 years.

The effort towards reducing the number of municipally-owned bridges on the Red List shows greater progress. Over the past twelve years the average number of Municipal owned Red List bridges removed from the list has been approximately 25 per year. In that same time period an average of approximately 17 bridges per year have been added to the Municipal Red List. The net decrease of Municipal bridges from the Red List is approximately 9 per year. However, it is recognized that there are nearly three times as many municipally-owned Red List bridges than state owned Red List bridges.

This Ten-Year Plan reflects the critical need to repair and maintain the State's bridges. Addressing Red List bridges has been prioritized. Approximately 90 of the 137 Red List bridges will be replaced/rehabilitated over the next ten years within the Fiscally Constrained Ten Year Plan. Additionally, another 21 Red List bridges will be addressed by Bridge Maintenance. This is a considerable focus on Red List bridge needs compared to previous Ten Year Plans. The Plan accelerates the relative pace of repairing Red List bridges. The Plan also includes specific funding

($80m) for addressing bridge preservation needs. Through these increased preservation efforts the rate that "near" – Red List bridges are added to the Red List will be reduced.

BRIDGE CONDITION
State Owned Bridges

(Number of Bridges = 2123)

New Hampshire DOT
Department of Transportation
Bureau of Transportation Planning

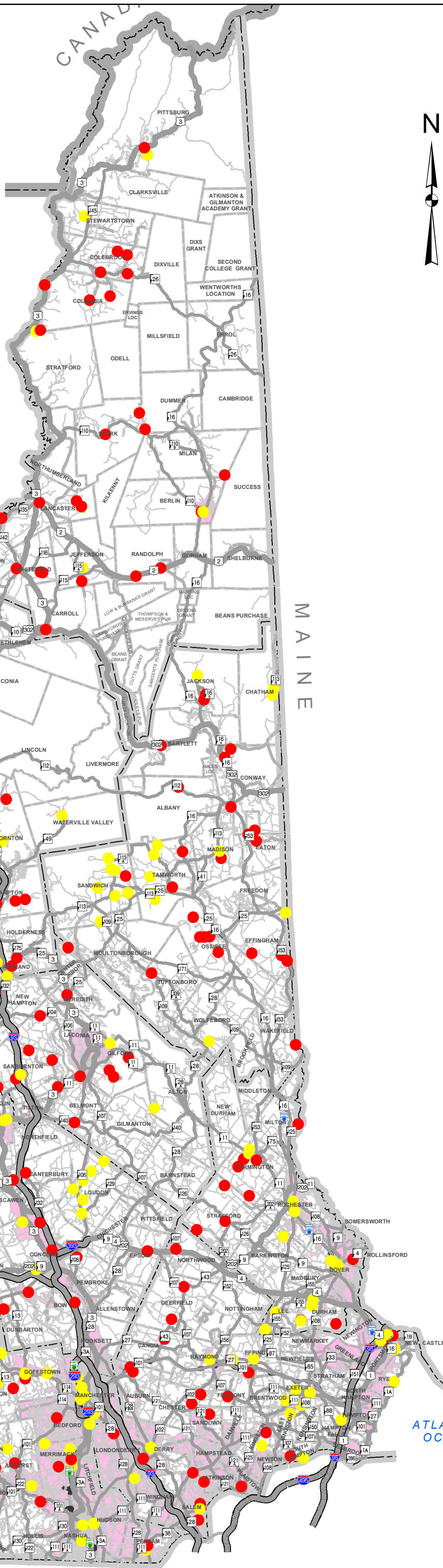
0 5 10 15 20 25
Miles

RED LISTED BRIDGES (137)

STRUCTUALLY DEFICIENT OR FUNCTIONALLY OBSOLETE NOT ELIGIBLE FOR RED LIST STATUS (208)

URBAN AREAS (CENSUS 2000)

THE MAPS FOR BRIDGE CONDITION REPRESENT THE STATUS AS OF APRIL, 2008. SINCE THE CONDITION OF OUR BRIDGES CHANGE OVER TIME, THERE MAY BE SOME BRIDGES WHICH HAVE HAD A CHANGE IN STATUS SINCE THIS MAP WAS PREPARED.



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BRIDGE CONDITION
Municipally Owned Bridges

(Number of Bridges = 1644)

New Hampshire DOT
Department of Transportation
Bureau of Transportation Planning

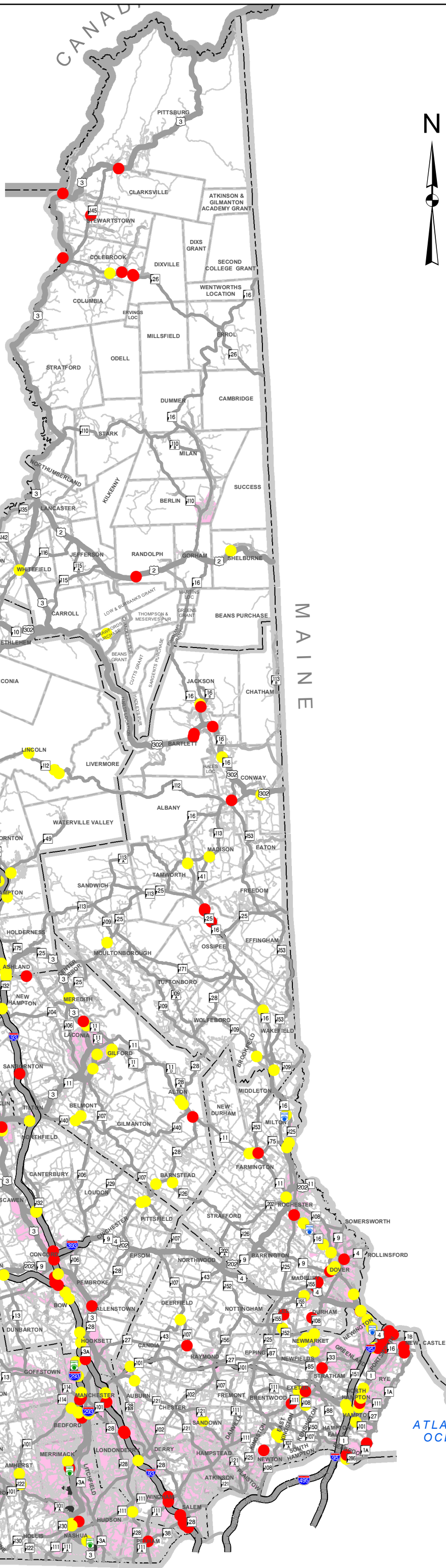
0 5 10 15 20 25
Miles

RED LISTED BRIDGES (370)

STRUCTUALLY DEFICIENT OR FUNCTIONALLY OBSOLETE NOT ELIGIBLE FOR RED LIST STATUS (225)

URBAN AREAS (CENSUS 2000)

THE MAPS FOR BRIDGE CONDITION REPRESENT THE STATUS AS OF APRIL, 2008. SINCE THE CONDITION OF OUR BRIDGES CHANGE OVER TIME, THERE MAY BE SOME BRIDGES WHICH HAVE HAD A CHANGE IN STATUS SINCE THIS MAP WAS PREPARED.



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